

<u>Term</u>	<u>Definition</u>
ILEC	Incumbent Local Exchange Carrier: A telephone carrier (service provider) that was operating a local telephone system prior to the divestiture of the AT&T Bell system. Also specifically defined in the Telecommunications Act of 1996 as a carrier providing local exchange service to a specific area as of the date of the enactment of the Act.
IP	Internet Protocol: The IP is a protocol describing software used on the Internet that routes outgoing messages, recognizes incoming messages, and keeps track of addresses for different nodes.
ISAM	Intelligent Services Access Manager
ISO/FCAPS	International Standards Organization/Fault Configuration Accounting Performance Security: ISO is a voluntary organization chartered by the United Nations in 1947 that develops and publishes international standards in many technical areas. FCAPS is a standard for the management of telecommunications networks. The standard embraces performance management which is the function of the proposed network monitoring system in Southeastern Wisconsin.
ISP	Internet Service Provider: A company that provides an end user with data communications service that allows them to connect to the Internet. An ISP purchases a high-speed link to the Internet and divides up the data transmission to allow many more users to connect to the Internet.
ITS	Intelligent Transportation System: A technology that employs computers, sensors and communications networks to improve the operation of transportation systems.
ITU	International Telecommunications Union: An organization based in Geneva, Switzerland, the most important telecom standards setting body in the world.
IXC	Interexchange Carriers
LAN	Local Area Network: A LAN is a communications network connecting computers, work stations, printers, file servers and other devices inside a building or campus.
LATA	Local Access Transport Area: An area served by a local telephone company in which it may offer both local and toll services.
LEO	Low Earth Orbit
LTE	Long-Term Evolution
MAC-Media	Media Access Control. Protocol for network access at layer 2 of OSI.
MC-CDMA	Advanced 4 th generation version of CDMA
Mesh Network	A network in which each is connected to multiple neighbor nodes.
MHz	Megahertz: A unit of frequency denoting one million Hertz (Hz) or one million cycles per second.

<u>Term</u>	<u>Definition</u>
MIB	Management Information Base: A database of network management information used by CMIP (common management information protocol) and SNMP (simple network management protocol).
MIMO	Multiple Input - Multiple Output: Involves the employment of phased array antennas for increased range of data transfer rates.
MMDS	Microwave Multipoint Distribution System: A method of distributing television signals through microwave from a single transmission point to multiple receiving points.
MOS	Mean Opinion Score
MPLS	Multiple Protocol Label Switching: MPLS is a widely supported method of speeding up IP-based communications over ATM or Ethernet networks.
MSC	Mobile Switching Center
Network Architecture	The philosophy and organizational concept for enabling communications between multiple locations and multiple organizational units. Network architecture is a structural statement of the terminal devices, switching elements and the protocols and procedures to be used for the establishment effective telecommunications.
OC	Optical Carrier: OC is a term used to designate transmission rates in fiber transmission systems using the SONET protocol.
OFDM	Orthogonal Frequency Division Multiplexing. A modulation technique for wireless communications.
OFDMA	Advanced version of OFDM using more frequency bands.
OSI	Open System Interconnection: A reference model developed by the ISO that defines the seven layers used in communication network protocols.
OSP	Optical Splitter
PCS	Personal Communication System: A low-powered, high frequency alternative to traditional wireless cellular communications systems.
P-OLT	Packet Optical Line Terminal
PON	Passive Optical Network
POP	Point of Presence: A physical location that allows an interexchange carrier (IXC) to connect to a local exchange company (LEC) within a LATA. The point of presence (POP) equipment is usually located in a building that houses switching and/or transmission equipment for the LEC.
POTS	Plain Old Telephone Service: The basic service supplying standard telephone single line telephones and access to the public switched network.

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PSC-WI	Public Service Commission of Wisconsin: The agency that regulates public utilities in Wisconsin.
PSTN	Public-Switched Telephone Network: The local, long distance, and international phone system.
QoS	Quality of Service: A measure of the quality of telephone service provided to a subscriber. It embraces a wide range of specific definitions depending on the type of service provided.
RBEV	Rank-based expected value method-a technique for evaluating alternative plans or other.
RF	Radio Frequency: Electromagnetic waves operating between 10 kHz and 30 GHz in either cables or free space.
RTM	Regional Traffic Matrix: A data matrix that defines the origins and destinations of voice, data, or multimedia communications in a geographic region.
SCADA	Supervisory Control and Data Acquisition Systems used by electric power, gas, water, wastewater and other utilities to monitor and manage the operation of geographically dispersed facilities.
Sectoral Cellular Network	A cellular network with 3 or 4 sectors at each access point.
SHF	Super High Frequency: The frequencies ranging from 3 GHz to 30 GHz (wavelengths between 10 cm and 1 cm).
SNMP	Simple Network Management Protocol: A standard communication protocol that is used to setup, test, and manage network equipment. By conforming to this protocol, equipment assemblies that are produced by different manufacturers can be managed by a single program. SNMP protocol can operate via Internet protocol.
SNR	Signal to Noise Ratio.
SONET/SDH	Synchronous Optical Network/Synchronous Digital Hierarchy: The current leading optical transmission protocols used in North America (SONET) and internationally (SDH).
T/DS	Transmission-Digital Signal: The T and DS define levels of digital transmission speed capabilities of digital lines and trunks. The T-1 line has a signaling speed of 1,544,000 bits per second.
TCP/IP	Transmission Control Protocol/Internet Protocol: TCP/IP is standard set (suite) of protocols that define the transmission of Internet messages. The Transmission Control Protocol (TCP) portion ensures message delivery between two points and the Internet Protocol (IP) defines the routing of physical packets of data.

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TCP/IQ	A website that collects and publishes data on broadband network performance.
TDMA	Time Division Multiple Access. One of several technologies used to separate multiple conversation transmissions over a finite frequency allocation of through-the-air bandwidth.
TIA	Telecommunications Industry Association: An association of telecommunications equipment manufacturers.
UHF	Ultra High Frequency. The frequency range from 300 MHz to 3000 MHz (3GHz).
UMTS	Universal Mobile Telecommunications System. Advanced version of GSM.
UNE	Unbundled Network Element: Network elements owned by ILECs that must be available to CLECs in accordance with the Telecommunications Act of 1996.
VA	Vulnerability Assessment: Methods used to determine the security of a network.
VDSL	Very High bit rate digital subscriber line.
VHF	Very High Frequency: The band of frequencies between the limits of 30 MHz and 300 MHz (wavelengths between 10 meters and 1 meter).
VoIP	Voice Over Internet Protocol: A process of sending voice telephone signals over the Internet. If the telephone signal is in analog form (voice or fax), the signal is first converted to a digital form. Packet routing information is then added to the digital voice signal so it can be routed through the Internet.
V-OLT	Video Optical Line Terminal in FTTN networks.
WAM	Web-based Access Manager
WAVE	Wireless Access In Vehicular Environments.
WCDMA	Wideband CDMA.
WiFi	Wireless Fidelity: A popular term for wireless local area networks operating under IEEE Standard 802.11b or 802.11g in the 2.4 GHz range.
WiFiA	A term for the higher frequency version of WiFi operating in the 5 GHz frequency band (IEEE standard 802.11a).
WiFi5	A higher frequency version of WiFi defined under IEEE Standard 802.11a operating in the 5 GHz frequency band.
WiMAX	(Worldwide Interoperability Microwave Access) Wireless Technology serving Metropolitan Area Networks under IEEE Standard 802.16.
WiMAXA	A term for the version of WiMAX operating in the 5 GHz frequency band.

<u>Term</u>	<u>Definition</u>
WLANS	Wireless Local Area Network. A LAN without wires.
WNMS	Wireless Network Monitoring System.
ZigBee	A standard for short range wireless sensor networks (IEEE 802.15.4). Operates in the 2.40 GHz band. Emphasizes small size, low power and low cost.